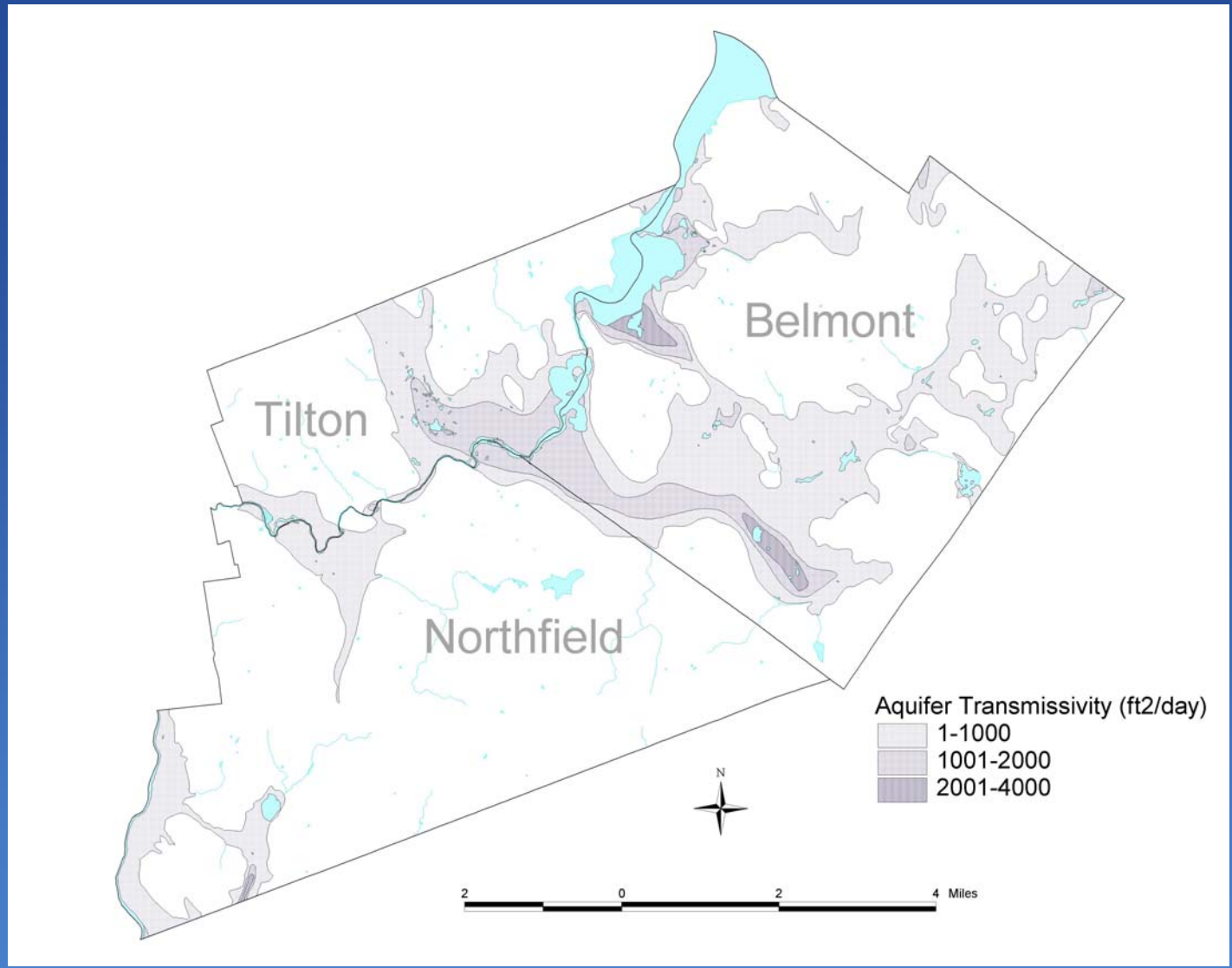
The Belmont/Northfield/Tilton Initiative to Protect Shared Drinking Water Resources

PROJECT OVERVIEW
NHDES May 2003

A collaborative project of the towns of Belmont, Northfield, and Tilton. Funding for this project is provided by a Source Water Protection Grant from the New Hampshire Department of Environmental Services and the Lakes Region Planning Commission.



"The primary thrust of this proposal addresses the need for *collaborative* drinking water resource planning among three municipalities."

Quotes from cover letter to grant application, November 2001

This project aims to:

- Provide Belmont, Northfield, and Tilton with a detailed assessment of threats to drinking water resources;
- Assist the towns in developing implementation strategies for projects based on these findings;
- Facilitate the exchange of information and ideas across town boundaries;
- Explore opportunities for collaborative initiatives to protect shared water resources.

Project Components

Initial Assessment

In-Depth Analysis

Reporting of Findings

Implementation Strategies

The key to the success of each component of this project is community participation.

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Project Components

Initial Assessment

- Begin to gather information from community representatives.
- Map relevant sub-regional characteristics.
- Gather demographic and hydrogeologic information.
- Review town ordinances as they relate to water resources.
- Carry out a Local Potential Contamination Source Inventory.
- Interview community members knowledgeable about drinking water resources.

Project Components

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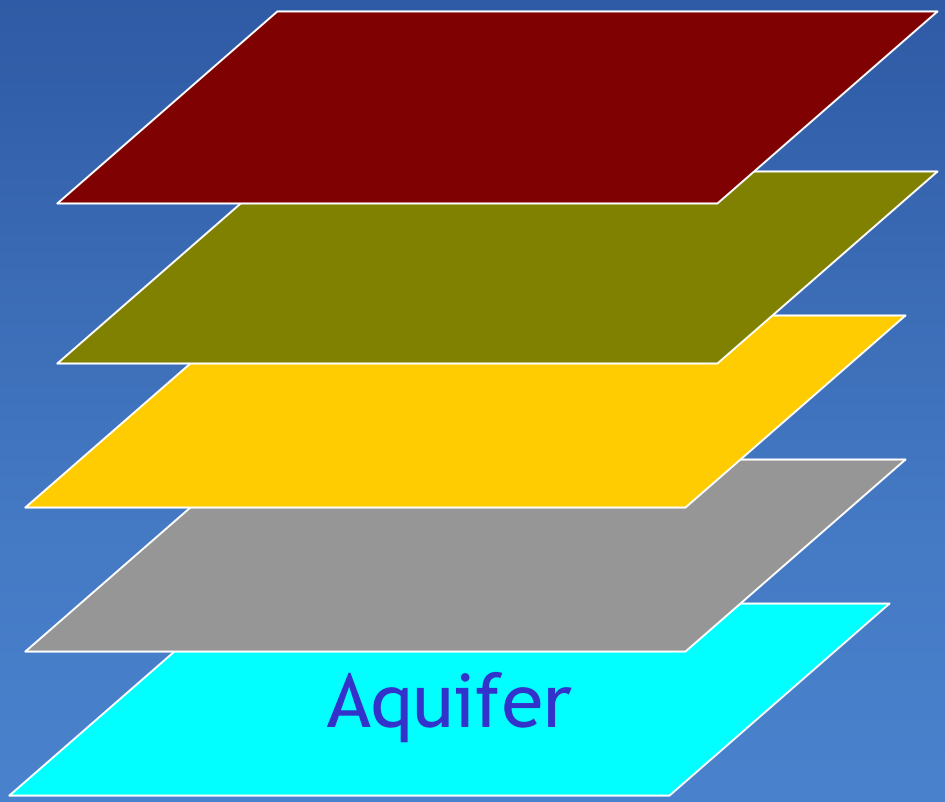
In-Depth Analysis

- Evaluate present and potential threats with the assistance of community representatives.
- Create and analyze map overlays.
- Evaluate town ordinances in terms of their ability to protect water resources over time.

Potential Threats to Groundwater Resources



Growth and Development

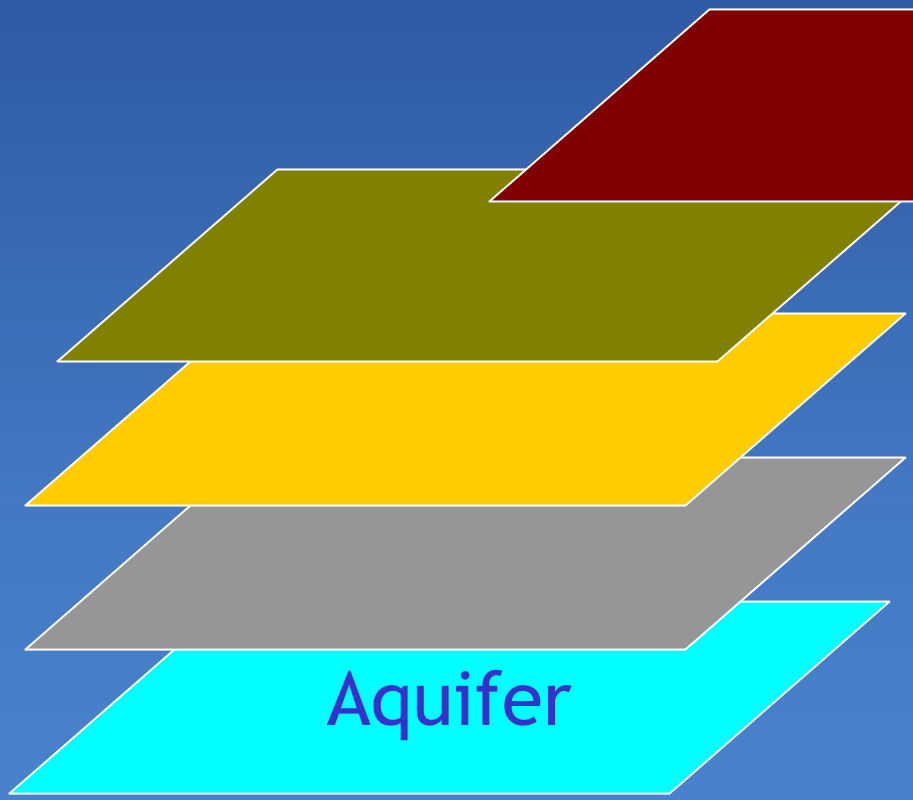
Present and Future Land Uses

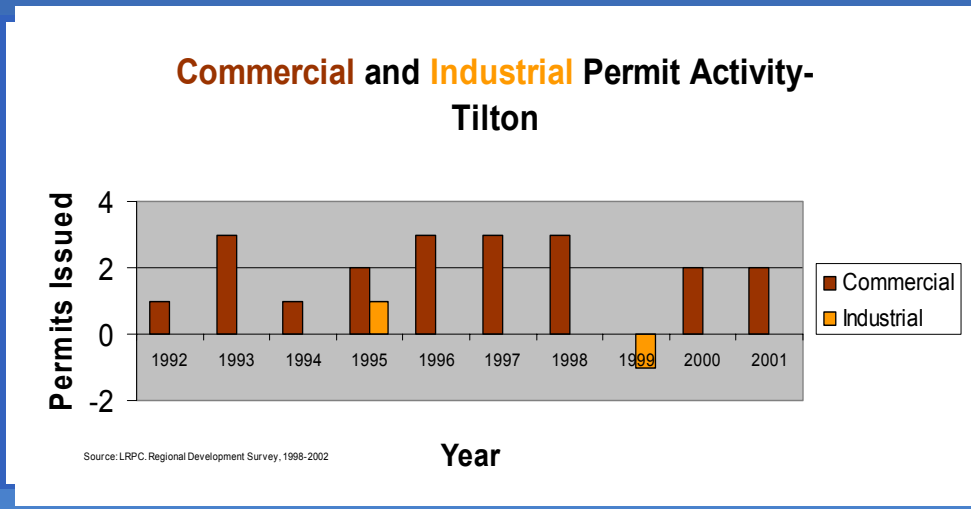
Potential Contamination Sources

Nonpoint Source Pollution

Potential Threats to Groundwater Resources

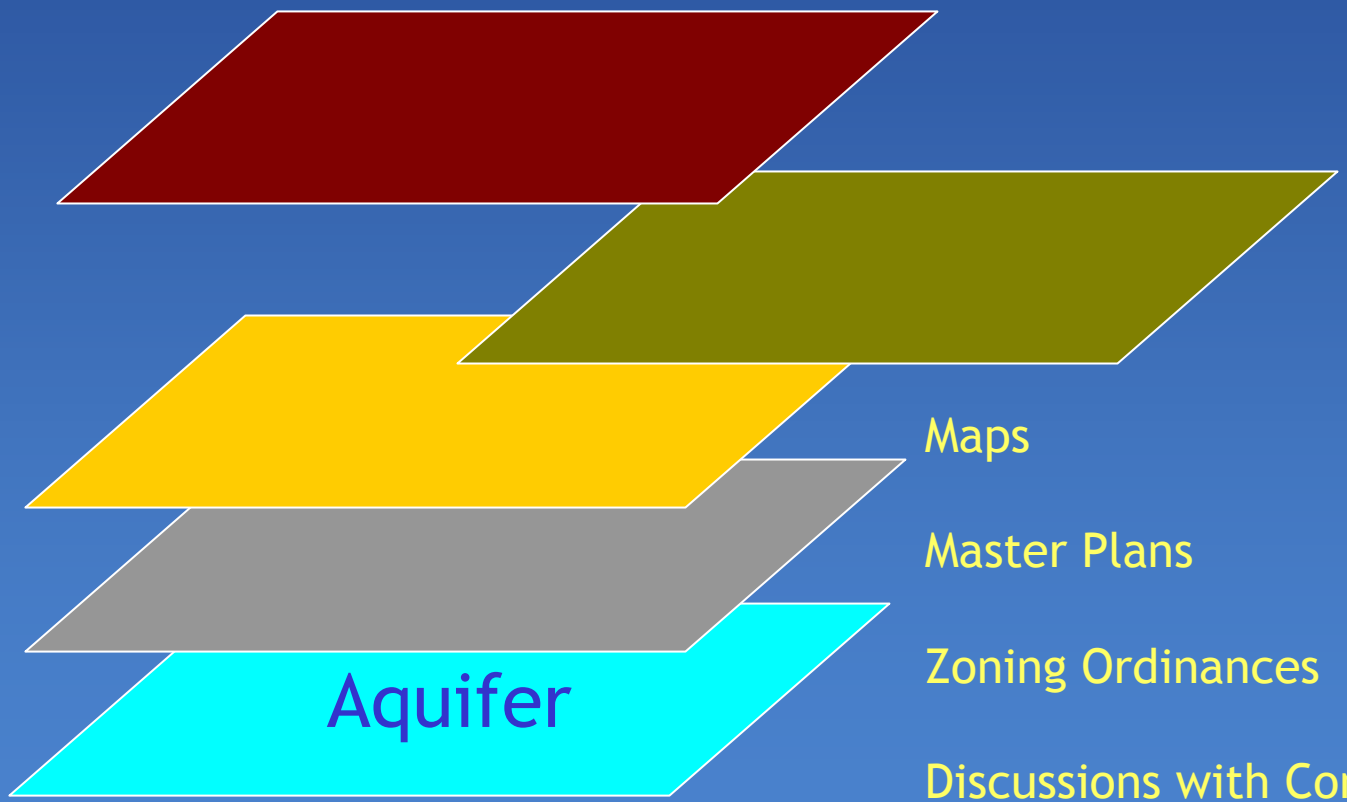
Growth and Development





Potential Threats to Groundwater Resources

Present and Future Land Uses

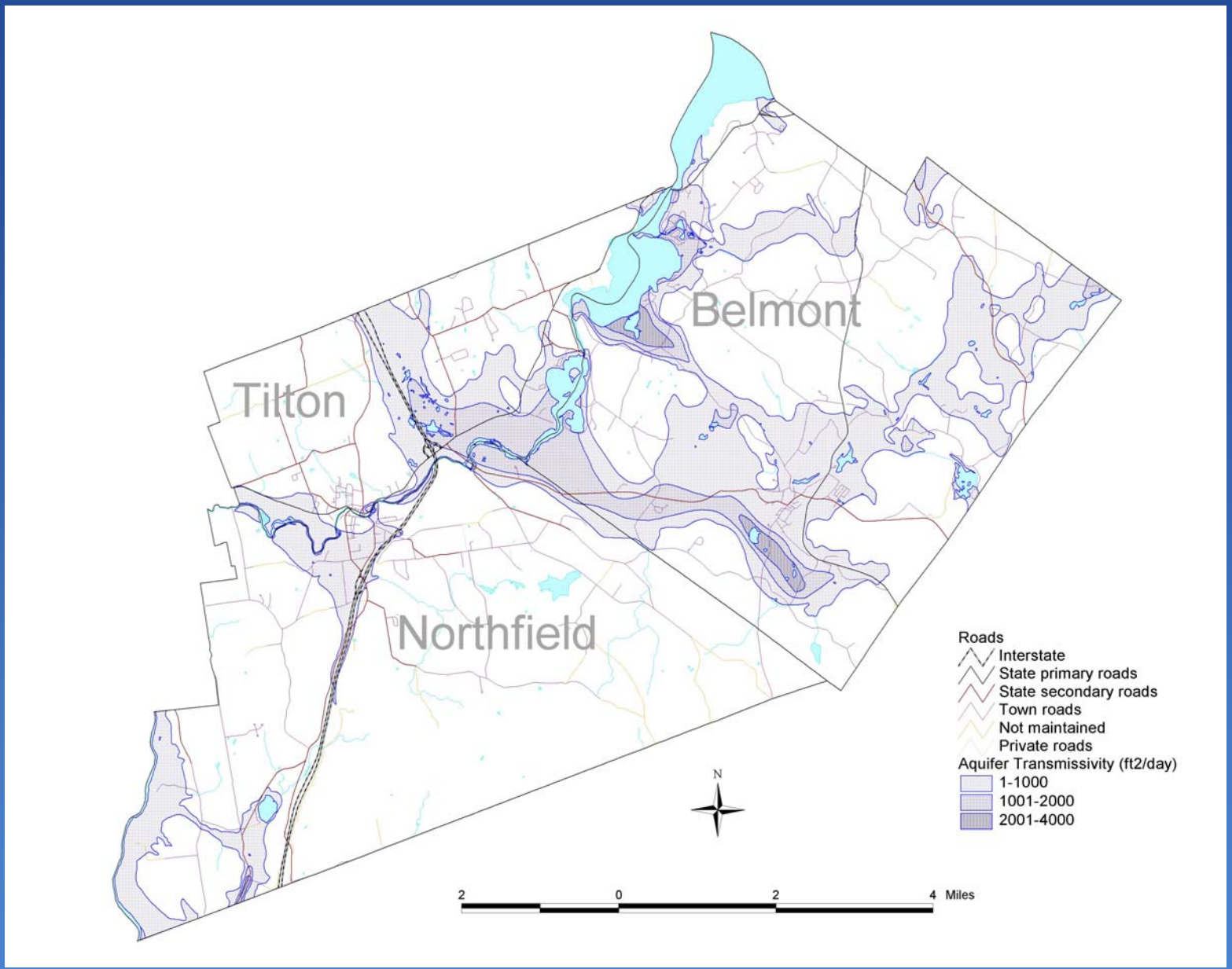


Maps

Master Plans

Zoning Ordinances

Discussions with Community Representatives


Belmont
Tilton
Northfield
Roads
Interstate
State primary roads
State secondary roads
Town roads
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Private roads
Aquifer Transmissivity (ft2/day)
1-1000
1001-2000
2001-4000
N
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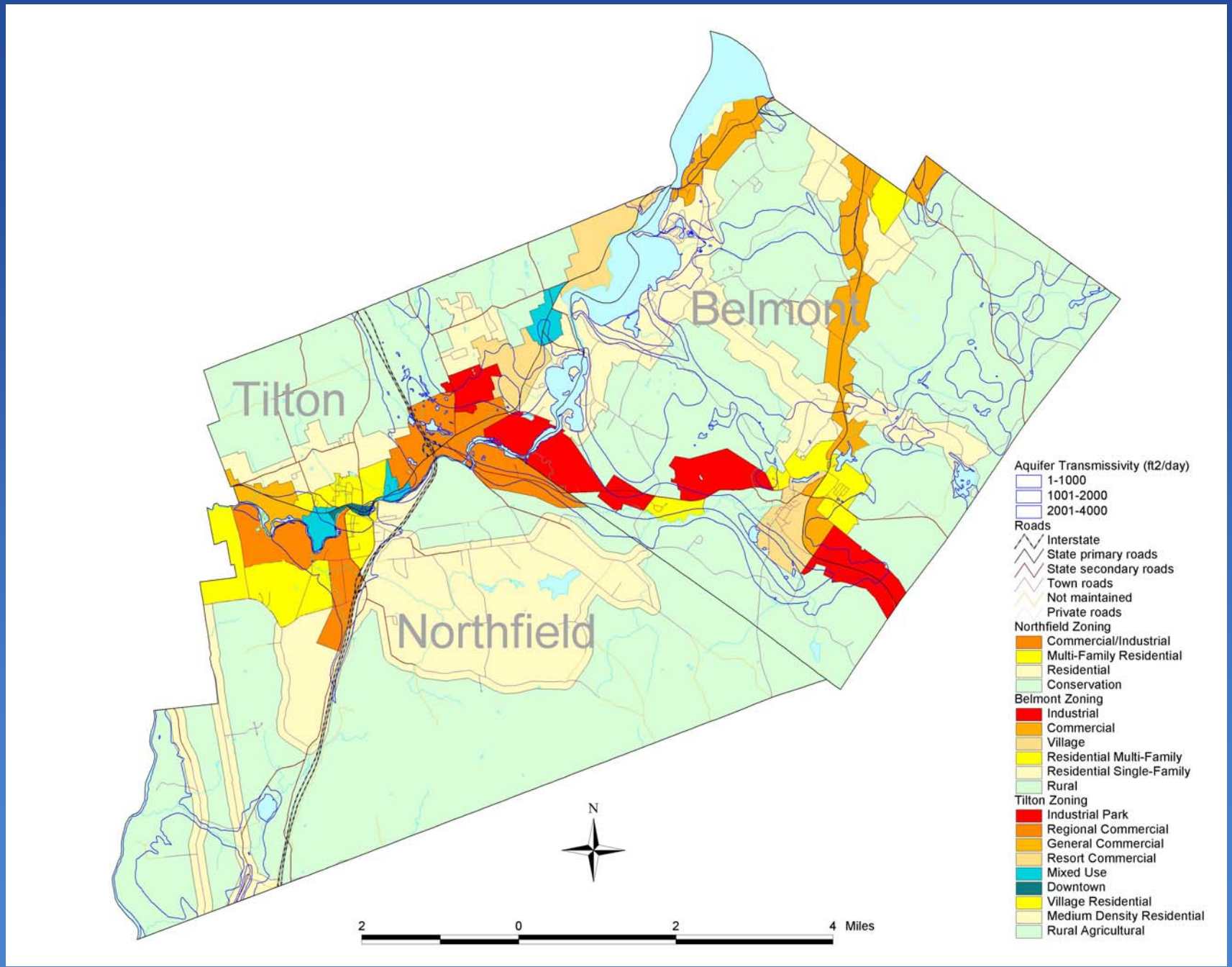
2
4 Miles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Multi-Family Residential
Residential
Conservation
Belmont Zoning
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Commercial
Village
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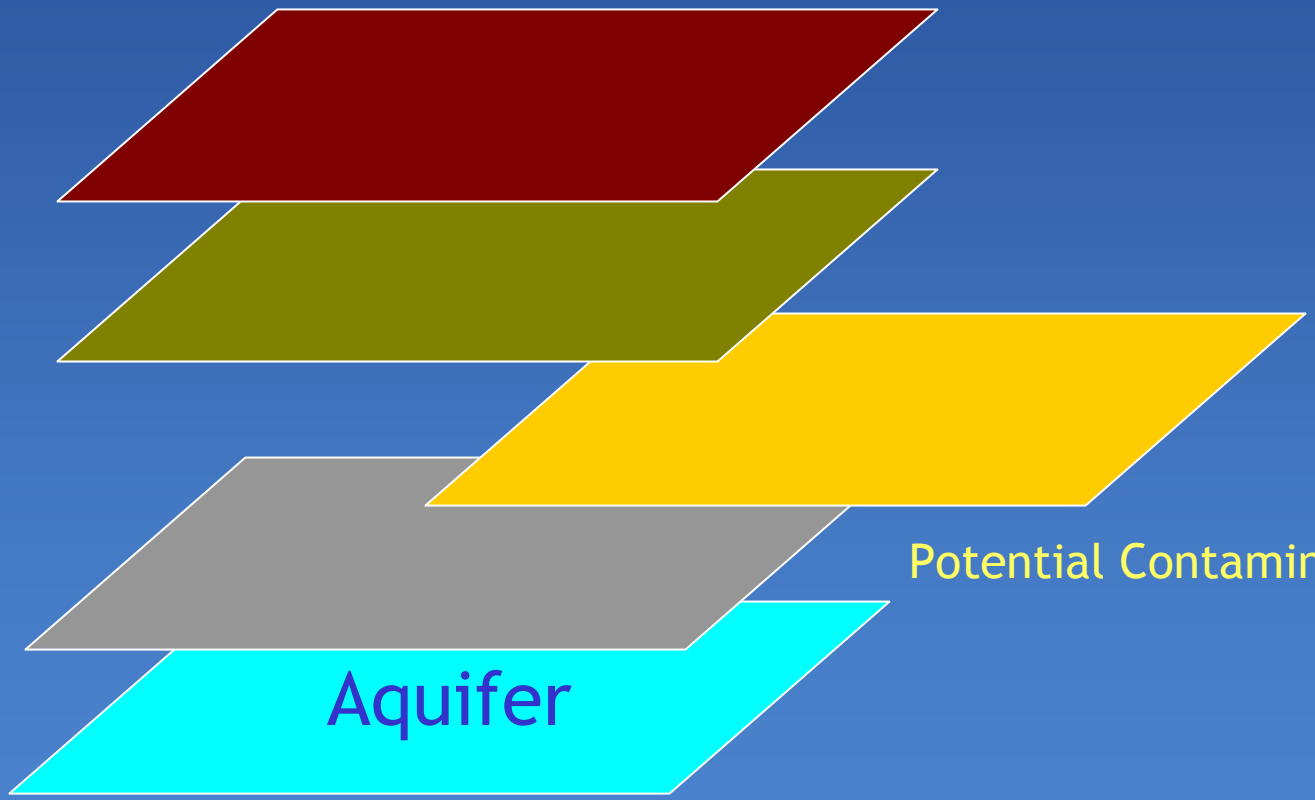
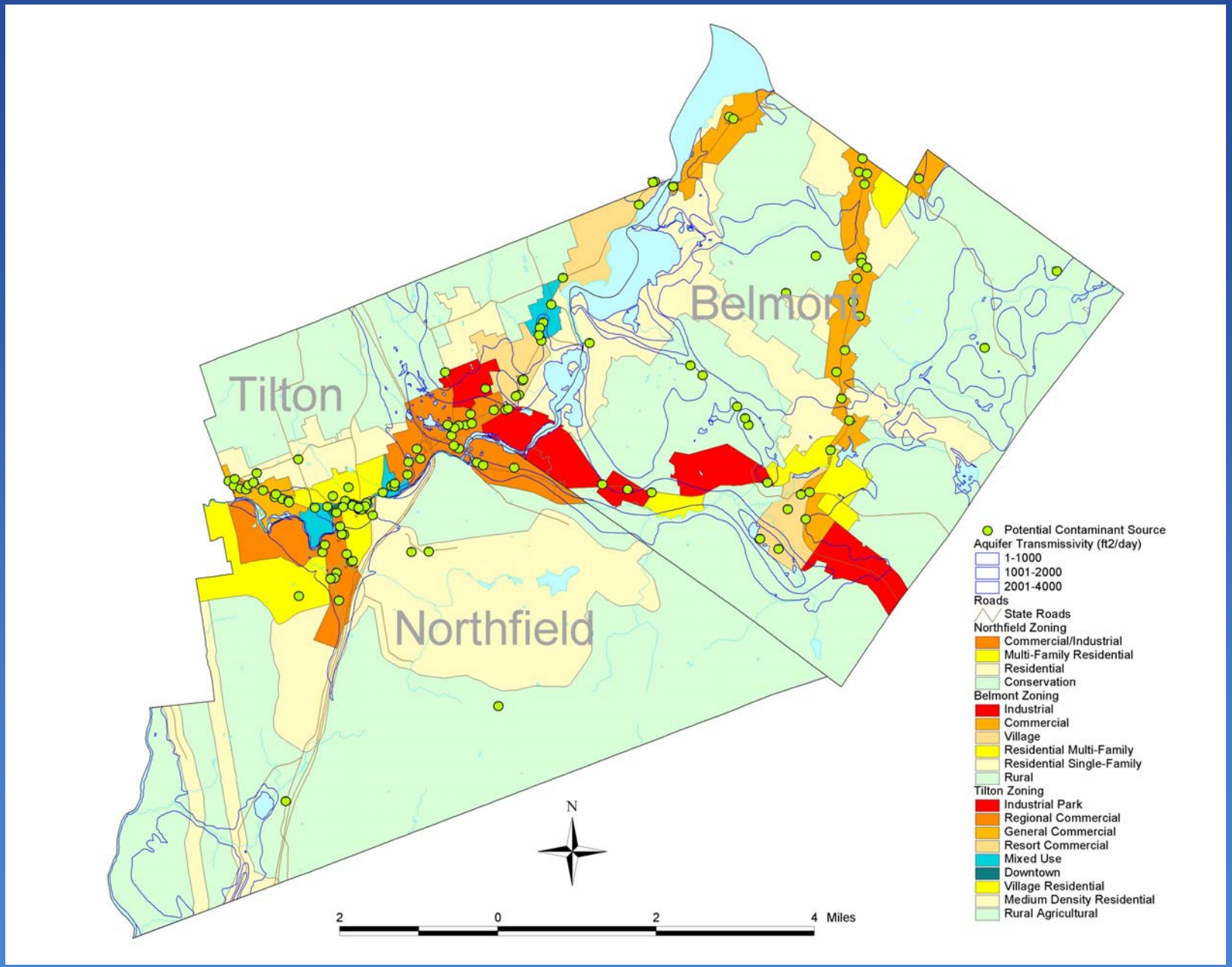
Residential Single-Family
Rural
Tilton Zoning
Industrial Park
Regional Commercial
General Commercial
Resort Commercial
Mixed Use
Downtown
Village Residential
Medium Density Residential
Rural Agricultural

Potential Threats to Groundwater Resources

Potential Contamination Sources



Potential Contamination Source Inventory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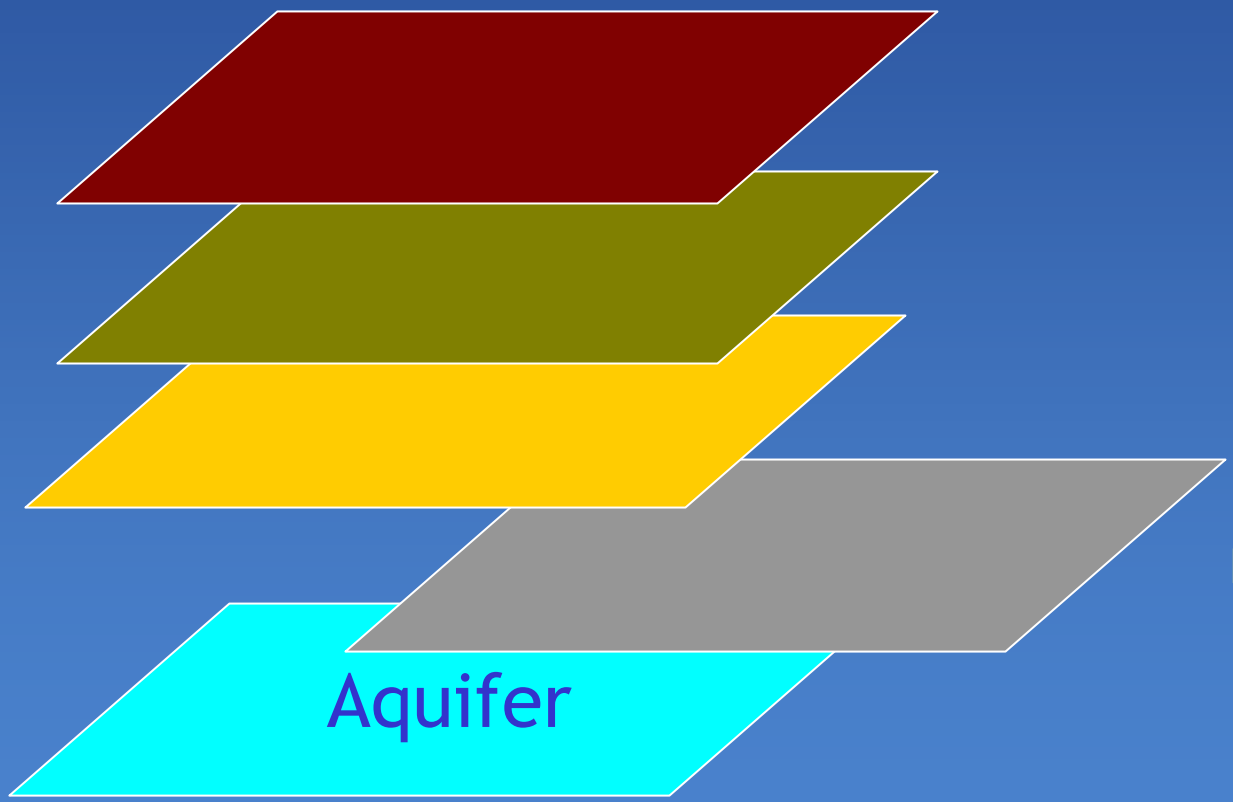
Potential Threats to Groundwater Resources

Nonpoint Source Pollution



Impervious Surface Analysis

Project Components

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Implementation Strategies

Reporting of Findings

- Draft a report that summarizes the findings, contains relevant maps and materials, and outlines project recommendations.
- Work with community representatives to develop and initiate an education and outreach program.

From a set of 11 broad recommendations, community representatives identified three recommendations as priorities for implementation.

A set of implementation strategies will be developed for those recommendations.

Project Components

Initial Assessment

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Implementation Strategies For Priority Projects

- Aquifer Protection Ordinance
- Site Plan Review/Subdivision Regulations
- Stormwater BMPs

Priority Recommendations

As Identified By Community Representatives

Priority 1: Develop an aquifer protection ordinance which will meet the needs of the three overlying communities. There are two approaches that could be taken: one set of standards, consistent between all three communities, or three different ordinances which increase the level of protection in all three communities.

Priority 2: Strengthen the subdivision and site plan review regulations in each community to minimize any potential negative impacts to the shared aquifer.

Priority 3: Develop Best Management Practices for commercial and industrial uses, suited to the needs of the three communities, to minimize pollution from stormwater runoff while encouraging recharge to the aquifer.

CHALLENGE: FINDING A BALANCE

Implementation Strategies

A separate document will be developed based on the priority recommendations, which will contain tools the three communities can use to implement their project priorities. This additional document will include specific recommendations, implementation strategies, resources, and a timeline for implementation.

Ultimately, if this project is successful:

- The three communities will work collaboratively to implement priority projects.
- The project will serve as a model for drinking water resource planning in the region.